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N. Arnold and L. Schleicher, Photo-stimulated CVD of SiN_x for GaAs IC applications 30 (1987) 64
V.V.Pham, D. Esteve, J. Farré, A. El Mahdy, M. Ronda and J.J. Simonne, InP native oxide: a drift factor in InP–MIS 30 (1987) 83
W. Kulisch, H. Rombach and R. Kassing, Reduction of the concentration of slow insulator states in SiO_2/InP–MIS structures 30 (1987) 89
F.H.P.M. Habraken, Characterization of LPCVD and PECVD silicon oxynitride films 30 (1987) 186
J.B. Oude Elferink, U.A. van der Heide, W.M. Arnold Bik, F.H.P.M. Habraken and W.F. van der Weg, Hydrogen distribution in oxynitride/oxide structures 30 (1987) 197
L. Do Thanh, V. Exner and P. Balk, Electrical properties of thin PECVD silicon oxynitride films 30 (1987) 204
P. Migliorato and D.B. Meakin, Material properties and characteristics of polysilicon transistors for large area electronics 30 (1987) 353
D.B. Meakin, N.A. Economou, P.A. Coxon, J. Stoemenos, A. Lowe and P. Migliorato, Low defect-density polycrystalline silicon for high performance thin film transistors 30 (1987) 372

Chlorine

C. Vinckier, P. Coeckelberghs, G. Stevens and S. De Jaegere, Oxidation of silicon in the afterglow of microwave induced plasmas 30 (1987) 40
K.J. Barlow, W. Eccleston and S. Taylor, Effects of low temperature annealing on the electrical properties of plasma grown oxides 30 (1987) 47

Conductance technique

P. Boher, M. Renaud, J.M. Lopez-Villegas, J. Schneider and J.P. Chane, $InGaAs/Si_3N_4$ interface obtained in ultrahigh vacuum multipolar plasma: in-situ control by ellipsometry and electrical characterization 30 (1987) 100
K.K. Hung and Y.C. Cheng, Determination of $Si–SiO_2$ interface trap properties of p-MOS structures with very thin oxides by conductance measurement 30 (1987) 114

Conduction

K. Hofmann, G.W. Rubloff, M. Liehr and D.R. Young, High temperature reaction and defect chemistry at the Si/SiO_2 interface 30 (1987) 25
T.N. Theis and B.D. Parker, Charge trapping in n-$Al_xGa_{1-x}As$ "insulators" and related device instabilities 30 (1987) 52
G. Unterbörsch, H.G. Bach, F. Schmitt, R. Schmidt and W. Schlaak, Dielectrics for passivation of planar InP/InGaAs diodes 30 (1987) 76
R. Girisch, R.P. Mertens and R.F. De Keersmaecker, A new method to determine Si/SiO_2 interface recombination parameters using a gate-controlled point-junction diode under illumination 30 (1987) 127
K.K. Young, C. Hu and W.G. Oldham, Charge transport and trapping model for scaled nitride–oxide stacked films 30 (1987) 171
R. Baunach and A. Spitzer, Interfacial tunneling barrier heights in triple-layer dielectrics 30 (1987) 180
L. Do Thanh, V. Exner and P. Balk, Electrical properties of thin PECVD silicon oxynitride films 30 (1987) 204
M.A. Sobolewski and C.R. Helms, Analysis of thin thermal silicon nitride films on silicon 30 (1987) 210
B. Balland, J.C. Bureau, A. Benamar, A. Ronda and A. Glachant, High and low thermal nitridation of SiO_2 thin films 30 (1987) 216
P. Fazan, M. Dutoit and M. Ilegems, Nitridation of thin SiO_2 films in N_2 and NH_3 plasmas 30 (1987) 224
M. El-Sayed and J. Camargo Da Costa, High field phenomena in thin plasma nitrided SiO_2 films 30 (1987) 229
X.R. Cheng, B.Y. Liu and Y.C. Cheng, Electrical conduction in thin thermally nitrided SiO_2 (nitroxide) 30 (1987) 237
D.J. DiMaria and M.V. Fischetti, Hot electrons in silicon dioxide: ballistic to steady-state transport 30 (1987) 278
A. Modelli, Valence band electron tunneling in metal–oxide–silicon structures 30 (1987) 298
A. Asenov, M. Bollu, F. Koch and J. Scholz, On the nature and energy distribution of defect states caused by hot electrons in Si 30 (1987) 319
P. Migliorato and D.B. Meakin, Material properties and characteristics of polysilicon transistors for large area electronics 30 (1987) 353
D.B. Meakin, N.A. Economou, P.A. Coxon, J. Stoemenos, A. Lowe and P. Migliorato, Low defect-density polycrystalline silicon for high performance thin film transistors 30 (1987) 372
Li Hui, Sun Guo-Liang, Zhan Juan and Tong Qin-Yi, Some material structural properties of SOI substrates produced by SDB technology 30 (1987) 397

Deep level transient spectroscopy

W. Kulisch, H. Rombach and R. Kassing, Reduction of the concentration of slow insulator states in SiO_2/InP–MIS structures 30 (1987) 89
Li Hui, Sun Guo-Liang, Zhan Juan and Tong Qin-Yi, Some material structural properties of SOI substrates produced by SDB technology 30 (1987) 397

Depth profiling

J.B. Oude Elferink, U.A. van der Heide, W.M. Arnold Bik, F.H.P.M. Habraken and W.F. van der Weg, Hydrogen distribution in oxynitride/oxide structures 30 (1987) 197
M.A. Sobolewski and C.R. Helms, Analysis of thin thermal silicon nitride films on silicon 30 (1987) 210
B. Balland, J.C. Bureau, A. Benamar, A. Ronda and A. Glachant, High and low thermal nitridation of SiO_2 thin films 30 (1987) 216
M. Offenberg and P. Balk, Ion implantation induced stoichiometric imbalance in SiO_2 30 (1987) 265
R.J. Chater, J.A. Kilner, E. Scheid, S. Cristoloveneau, P.L.F. Hemment and K.J. Reeson, Optical and compositional studies of buried oxide layers in silicon formed by high dose implantation 30 (1987) 390

Dielectric strength

K. Hofmann, G.W. Rubloff, M. Liehr and D.R. Young, High temperature reaction and defect chemistry at the Si/SiO_2 interface 30 (1987) 25
K.J. Barlow, W. Eccleston and S. Taylor, Effects of low temperature annealing on the electrical properties of plasma grown oxides 30 (1987) 47
C. Santinelli, R. Blanchet, P. Viktorovitch and F. Benyahia, Ion beam enhanced deposition of AlN_xO_y alloys on InP 30 (1987) 69
G. Unterbörsch, H.G. Bach, F. Schmitt, R. Schmidt and W. Schlaak, Dielectrics for passivation of planar InP/InGaAs diodes 30 (1987) 76
K.K. Young, C. Hu and W.G. Oldham, Charge transport and trapping model for scaled nitride–oxide stacked films 30 (1987) 171
L. Do Thanh, V. Exner and P. Balk, Electrical properties of thin PECVD silicon oxynitride films 30 (1987) 204
B. Balland, J.C. Bureau, A. Benamar, A. Ronda and A. Glachant, High and low thermal nitridation of SiO_2 thin films 30 (1987) 216
P. Fazan, M. Dutoit and M. Ilegems, Nitridation of thin SiO_2 films in N_2 and NH_3 plasmas 30 (1987) 224
D.J. DiMaria and M.V. Fischetti, Hot electrons in silicon dioxide: ballistic to steady-state transport 30 (1987) 278
S.K. Haywood, M.M. Heyns and R.F. De Keersmaecker, The statistics of dielectric breakdown in MOS capacitors under static and dynamic voltage stress 30 (1987) 325
M. Dutoit, P. Fazan, A. Benjelloun, M. Ilegems and J.-M. Moret, Charge trapping and breakdown in thin SiO_2 polysilicon-gate MOS capacitors 30 (1987) 333

Diffusion

A.H. van Ommen, Diffusion of Group III and V elements in SiO_2 30 (1987) 244

DX centers

T.N. Theis and B.D. Parker, Charge trapping in n-$Al_xGa_{1-x}As$ "insulators" and related device instabilities 30 (1987) 52

Elastic recoil detection

F.H.P.M. Habraken, Characterization of LPCVD and PECVD silicon oxynitride films 30 (1987) 186

J.B. Oude Elferink, U.A. van der Heide, W.M. Arnold Bik, F.H.P.M. Habraken and W.F. van der Weg, Hydrogen distribution in oxynitride/oxide structures 30 (1987) 197

Electrical instabilities

K.J. Barlow, W. Eccleston and S. Taylor, Effects of low temperature annealing on the electrical properties of plasma grown oxides 30 (1987) 47

V.V.Pham, D. Esteve, J. Farré, A. El Mahdy, M. Ronda and J.J. Simonne, InP native oxide: a drift factor in InP–MIS 30 (1987) 83

W. Kulisch, H. Rombach and R. Kassing, Reduction of the concentration of slow insulator states in SiO_2/InP–MIS structures 30 (1987) 89

G.P. Donzelli and B. Gabbrielli, Comparative effects of polymide and PECVD silicon nitride as passivating layers on GaAs power MESFET characteristics 30 (1987) 95

S.K. Krawczyk and K. Schohe, Photoluminescence transient response as a tool to "track" the origin of drift phenomena at the InP/insulator interface 30 (1987) 108

P. Fazan, M. Dutoit and M. Ilegems, Nitridation of thin SiO_2 films in N_2 and NH_3 plasmas 30 (1987) 224

Electrical noise

M. Boïlu, F. Koch, A. Madenach and J. Scholz, Electrical switching and noise spectrum of Si–SiO_2 interface defects generated by hot electrons 30 (1987) 142

M.J. Kirton, M.J. Uren and S. Collins, Individual interface states and their implications for low-frequency noise in MOSFETs 30 (1987) 148

Electrochemistry

R.B. Beck, Constant current versus constant voltage plasma anodization techniques 30 (1987) 32

C. Vinckier, P. Coeckelberghs, G. Stevens and S. De Jaegere, Oxidation of silicon in the afterglow of microwave induced plasmas 30 (1987) 40

Electron bombardment

B. Balland, J.C. Bureau, A. Benamar, A. Ronda and A. Glachant, High and low thermal nitridation of SiO_2 thin films 30 (1987) 216

Electron emission

D.J. DiMaria and M.V. Fischetti, Hot electrons in silicon dioxide: ballistic to steady-state transport 30 (1987) 278

Electron energy

D.J. DiMaria and M.V. Fischetti, Hot electrons in silicon dioxide: ballistic to steady-state transport 30 (1987) 278

Electron microscopy

M. El-Sayed and J. Camargo Da Costa, High field phenomena in thin plasma nitrided SiO_2 films 30 (1987) 229

P. Migliorato and D.B. Meakin, Material properties and characteristics of polysilicon transistors for large area electronics 30 (1987) 353

D.B. Meakin, N.A. Economou, P.A. Coxon, J. Stoemenos, A. Lowe and P. Migliorato, Low defect-density polycrystalline silicon for high performance thin film transistors 30 (1987) 372

A.H. van Ommen and M.P.A. Viegers, Buried oxide formation in Si by high-dose implantation of oxygen 30 (1987) 383

Electron spin resonance

A. Stesmans, Low-temperature ESR study of P_{b0} defects residing in the (111) Si/native oxide interface 30 (1987) 134

F.H.P.M. Habraken, Characterization of LPCVD and PECVD silicon oxynitride films 30 (1987) 186

Ellipsometry

C. Vinckier, P. Coeckelberghs, G. Stevens and S. De Jaegere, Oxidation of silicon in the afterglow of microwave induced plasmas 30 (1987) 40

P. Boher, M. Renaud, J.M. Lopez-Villegas, J. Schneider and J.P. Chane, $InGaAs/Si_3N_4$ interface obtained in ultrahigh vacuum multipolar plasma: in-situ control by ellipsometry and electrical characterization 30 (1987) 100

R.J. Chater, J.A. Kilner, E. Scheid, S. Cristoloveneau, P.L.F. Hemment and K.J. Reeson, Optical and compositional studies of buried oxide layers in silicon formed by high dose implantation 30 (1987) 390

Energy barriers

R. Baunach and A. Spitzer, Interfacial tunneling barrier heights in triple-layer dielectrics 30 (1987) 180

M.A. Sobolewski and C.R. Helms, Analysis of thin thermal silicon nitride films on silicon 30 (1987) 210

X.R. Cheng, B.Y. Liu and Y.C. Cheng, Electrical conduction in thin thermally nitrided SiO_2 (nitroxide) 30 (1987) 237

A. Modelli, Valence band electron tunneling in metal–oxide–silicon structures 30 (1987) 298
P. Migliorato and D.B. Meakin, Material properties and characteristics of polysilicon transistors for large area electronics 30 (1987) 353

Epitaxy

H. Zogg and S. Blunier, Properties of graded Group IIa fluoride buffer layers for semiconductor heteroepitaxy 30 (1987) 402

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M.A. Sobolewski and C.R. Helms, Analysis of thin thermal silicon nitride films on silicon 30 (1987) 210
P. Fazan, M. Dutoit and M. Ilegems, Nitridation of thin SiO_2 films in N_2 and NH_3 plasmas 30 (1987) 224
R.J. Chater, J.A. Kilner, E. Scheid, S. Cristoloveneau, P.L.F. Hemment and K.J. Reeson, Optical and compositional studies of buried oxide layers in silicon formed by high dose implantation 30 (1987) 390
Li Hui, Sun Guo-Liang, Zhan Juan and Tong Qin-Yi, Some material structural properties of SOI substrates produced by SDB technology 30 (1987) 397

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A.H. van Ommen, Diffusion of Group III and V elements in SiO_2 30 (1987) 244

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T.N. Theis and B.D. Parker, Charge trapping in n-$Al_xGa_{1-x}As$ "insulators" and related device instabilities 30 (1987) 52
N. Arnold and L. Schleicher, Photo-stimulated CVD of SiN_x for GaAs IC applications 30 (1987) 64
G.P. Donzelli and B. Gabbrielli, Comparative effects of polymide and PECVD silicon nitride as passivating layers on GaAs power MESFET characteristics 30 (1987) 95

Grain boundaries

P. Migliorato and D.B. Meakin, Material properties and characteristics of polysilicon transistors for large area electronics 30 (1987) 353
D.B. Meakin, N.A. Economou, P.A. Coxon, J. Stoemenos, A. Lowe and P. Migliorato, Low defect-density polycrystalline silicon for high performance thin film transistors 30 (1987) 372

Heterostructures

T.N. Theis and B.D. Parker, Charge trapping in n-$Al_xGa_{1-x}As$ "insulators" and related device instabilities 30 (1987) 52

G. Unterbörsch, H.G. Bach, F. Schmitt, R. Schmidt and W. Schlaak, Dielectrics for passivation of planar InP/InGaAs diodes 30 (1987) 76

Hot electrons

T.N. Theis and B.D. Parker, Charge trapping in n-$Al_xGa_{1-x}As$ "insulators" and related device instabilities 30 (1987) 52
M. Bollu, F. Koch, A. Madenach and J. Scholz, Electrical switching and noise spectrum of Si–SiO_2 interface defects generated by hot electrons 30 (1987) 142
M.J. Kirton, M.J. Uren and S. Collins, Individual interface states and their implications for low-frequency noise in MOSFETs 30 (1987) 148
D.J. DiMaria and M.V. Fischetti, Hot electrons in silicon dioxide: ballistic to steady-state transport 30 (1987) 278
C.T. Sah, Models and experiments on degradation of oxidized silicon (Extended Abstract) 30 (1987) 311
P. Heremans, Y.-C. Sun, G. Groeseneken and H.E. Maes, Evaluation of channel hot carrier effects in n-MOS transistors at 77 K with the charge pumping technique 30 (1987) 313
A. Asenov, M. Bollu, F. Koch and J. Scholz, On the nature and energy distribution of defect states caused by hot electrons in Si 30 (1987) 319
S.N. Kuznetsov and V.A. Gurtov, Charge storage in MOS structures as affected by avalanche- and photoinjection 30 (1987) 347

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P. Heremans, Y.-C. Sun, G. Groeseneken and H.E. Maes, Evaluation of channel hot carrier effects in n-MOS transistors at 77 K with the charge pumping technique 30 (1987) 313

Hydrogen

P. Boher, M. Renaud, J.M. Lopez-Villegas, J. Schneider and J.P. Chane, InGaAs/Si_3N_4 interface obtained in ultrahigh vacuum multipolar plasma: in-situ control by ellipsometry and electrical characterization 30 (1987) 100
F.H.P.M. Habraken, Characterization of LPCVD and PECVD silicon oxynitride films 30 (1987) 186
J.B. Oude Elferink, U.A. van der Heide, W.M. Arnold Bik, F.H.P.M. Habraken and W.F. van der Weg, Hydrogen distribution in oxynitride/oxide structures 30 (1987) 197
P. Balk, L. Do Thanh, S. Ewert, M. Kuball and S. Schmitz, Interface states and impurities in MOS structures with very thin tunneling barriers 30 (1987) 304
C.T. Sah, Models and experiments on degradation of oxidized silicon (Extended Abstract) 30 (1987) 311
P. Migliorato and D.B. Meakin, Material properties and characteristics of polysilicon transistors for large area electronics 30 (1987) 353
D.B. Meakin, N.A. Economou, P.A. Coxon, J. Stoemenos, A. Lowe and P. Migliorato, Low defect-density polycrystalline silicon for high performance thin film transistors 30 (1987) 372

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A.H. van Ommen, Diffusion of Group III and V elements in SiO_2 30 (1987) 244

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G. Unterbörsch, H.G. Bach, F. Schmitt, R. Schmidt and W. Schlaak, Dielectrics for passivation of planar InP/InGaAs diodes 30 (1987) 76

P. Boher, M. Renaud, J.M. Lopez-Villegas, J. Schneider and J.P. Chane, $InGaAs/Si_3N_4$ interface obtained in ultrahigh vacuum multipolar plasma: in-situ control by ellipsometry and electrical characterization 30 (1987) 100

Indium phosphide

C. Santinelli, R. Blanchet, P. Viktorovitch and F. Benyahia, Ion beam enhanced deposition of AlN_xO_y alloys on InP 30 (1987) 69

G. Unterbörsch, H.G. Bach, F. Schmitt, R. Schmidt and W. Schlaak, Dielectrics for passivation of planar InP/InGaAs diodes 30 (1987) 76

V.V.Pham, D. Esteve, J. Farré, A. El Mahdy, M. Ronda and J.J. Simonne, InP native oxide: a drift factor in InP–MIS 30 (1987) 83

W. Kulisch, H. Rombach and R. Kassing, Reduction of the concentration of slow insulator states in SiO_2/InP–MIS structures 30 (1987) 89

S.K. Krawczyk and K. Schohe, Photoluminescence transient response as a tool to "track" the origin of drift phenomena at the InP/insulator interface 30 (1987) 108

Inelastic electron tunneling spectroscopy

P. Balk, L. Do Thanh, S. Ewert, M. Kuball and S. Schmitz, Interface states and impurities in MOS structures with very thin tunneling barriers 30 (1987) 304

Infrared spectroscopy

F.H.P.M. Habraken, Characterization of LPCVD and PECVD silicon oxynitride films 30 (1987) 186

Insulators

C. Santinelli, R. Blanchet, P. Viktorovitch and F. Benyahia, Ion beam enhanced deposition of AlN_xO_y alloys on InP 30 (1987) 69

Interface charge

K.J. Barlow, W. Eccleston and S. Taylor, Effects of low temperature annealing on the electrical properties of plasma grown oxides 30 (1987) 47

K.K. Hung and Y.C. Cheng, Determination of $Si–SiO_2$ interface trap properties of p-MOS structures with very thin oxides by conductance measurement 30 (1987) 114

K.K. Young, C. Hu and W.G. Oldham, Charge transport and trapping model for scaled nitride–oxide stacked films 30 (1987) 171
L. Do Thanh, V. Exner and P. Balk, Electrical properties of thin PECVD silicon oxynitride films 30 (1987) 204
P. Fazan, M. Dutoit and M. Ilegems, Nitridation of thin SiO_2 films in N_2 and NH_3 plasmas 30 (1987) 224
M. Dutoit, P. Fazan, A. Benjelloun, M. Ilegems and J.-M. Moret, Charge trapping and breakdown in thin SiO_2 polysilicon-gate MOS capacitors 30 (1987) 333

Interface states

V.V.Pham, D. Esteve, J. Farré, A. El Mahdy, M. Ronda and J.J. Simonne, InP native oxide: a drift factor in InP–MIS 30 (1987) 83
W. Kulisch, H. Rombach and R. Kassing, Reduction of the concentration of slow insulator states in SiO_2/InP–MIS structures 30 (1987) 89
P. Boher, M. Renaud, J.M. Lopez-Villegas, J. Schneider and J.P. Chane, InGaAs/Si_3N_4 interface obtained in ultrahigh vacuum multipolar plasma: in-situ control by ellipsometry and electrical characterization 30 (1987) 100
S.K. Krawczyk and K. Schohe, Photoluminescence transient response as a tool to "track" the origin of drift phenomena at the InP/insulator interface 30 (1987) 108
K.K. Hung and Y.C. Cheng, Determination of Si–SiO_2 interface trap properties of p-MOS structures with very thin oxides by conductance measurement 30 (1987) 114
J. Esteve, J. Samitier, H. Altelarrea, A. Herms and J.R. Morante, Time-dependent response of interface states determined by using differential isothermal transient spectroscopy 30 (1987) 120
R. Girisch, R.P. Mertens and R.F. De Keersmaecker, A new method to determine Si/SiO_2 interface recombination parameters using a gate-controlled point-junction diode under illumination 30 (1987) 127
A. Stesmans, Low-temperature ESR study of P_{b0} defects residing in the (111) Si/native oxide interface 30 (1987) 134
M. Bollu, F. Koch, A. Madenach and J. Scholz, Electrical switching and noise spectrum of Si–SiO_2 interface defects generated by hot electrons 30 (1987) 142
M.J. Kirton, M.J. Uren and S. Collins, Individual interface states and their implications for low-frequency noise in MOSFETs 30 (1987) 148
G.L. Heyns and H.E. Maes, A new model for the discharge behaviour of metal–nitride–oxide–silicon (MNOS) non-volatile memory devices 30 (1987) 153
L. Do Thanh, V. Exner and P. Balk, Electrical properties of thin PECVD silicon oxynitride films 30 (1987) 204
P. Fazan, M. Dutoit and M. Ilegems, Nitridation of thin SiO_2 films in N_2 and NH_3 plasmas 30 (1987) 224
M. El-Sayed and J. Camargo Da Costa, High field phenomena in thin plasma nitrided SiO_2 films 30 (1987) 229
P. Balk, L. Do Thanh, S. Ewert, M. Kuball and S. Schmitz, Interface states and impurities in MOS structures with very thin tunneling barriers 30 (1987) 304
P. Heremans, Y.-C. Sun, G. Groeseneken and H.E. Maes, Evaluation of channel hot carrier effects in n-MOS transistors at 77 K with the charge pumping technique 30 (1987) 313
A. Asenov, M. Bollu, F. Koch and J. Scholz, On the nature and energy distribution of defect states caused by hot electrons in Si 30 (1987) 319

R.B. Calligaro, Improvement of the Si–SiO_2 interface stress resistance of thin gate oxides after channel ion implantation 30 (1987) 339
P. Migliorato and D.B. Meakin, Material properties and characteristics of polysilicon transistors for large area electronics 30 (1987) 353
Li Hui, Sun Guo-Liang, Zhan Juan and Tong Qin-Yi, Some material structural properties of SOI substrates produced by SDB technology 30 (1987) 397

Ion assisted deposition

C. Santinelli, R. Blanchet, P. Viktorovitch and F. Benyahia, Ion beam enhanced deposition of AlN_xO_y alloys on InP 30 (1987) 69

Ion bombardment

C. Santinelli, R. Blanchet, P. Viktorovitch and F. Benyahia, Ion beam enhanced deposition of AlN_xO_y alloys on InP 30 (1987) 69

Ion implantation

K. Hofmann, G.W. Rubloff, M. Liehr and D.R. Young, High temperature reaction and defect chemistry at the Si/SiO_2 interface 30 (1987) 25
A.H. van Ommen, Diffusion of Group III and V elements in SiO_2 30 (1987) 244
M. Offenberg and P. Balk, Ion implantation induced stoichiometric imbalance in SiO_2 30 (1987) 265
H. Neitzert, M. Offenberg and P. Balk, Hole capture in SiO_2 films after ion implantation 30 (1987) 272
R.B. Calligaro, Improvement of the Si–SiO_2 interface stress resistance of thin gate oxides after channel ion implantation 30 (1987) 339
A.H. van Ommen and M.P.A. Viegers, Buried oxide formation in Si by high-dose implantation of oxygen 30 (1987) 383
R.J. Chater, J.A. Kilner, E. Scheid, S. Cristoloveneau, P.L.F. Hemment and K.J. Reeson, Optical and compositional studies of buried oxide layers in silicon formed by high dose implantation 30 (1987) 390

Kinetics of steady state reactions

E.A. Irene and R. Ghez, Thermal oxidation of silicon: new experimental results and models 30 (1987) 1
J.M. deLarios, C.R. Helms, D.B. Kao and B.E. Deal, Effect of silicon surface cleaning procedures on oxidation kinetics and surface chemistry 30 (1987) 17
R.B. Beck, Constant current versus constant voltage plasma anodization techniques 30 (1987) 32

Lead chalcogenides

H. Zogg and S. Blunier, Properties of graded Group IIa fluoride buffer layers for semiconductor heteroepitaxy 30 (1987) 402

Luminescence

S.K. Krawczyk and K. Schohe, Photoluminescence transient response as a tool to "track" the origin of drift phenomena at the InP/insulator interface 30 (1987) 108
D.J. DiMaria and M.V. Fischetti, Hot electrons in silicon dioxide: ballistic to steady-state transport 30 (1987) 278

MESFET (metal–semiconductor field effect transistor)

N. Arnold and L. Schleicher, Photo-stimulated CVD of SiN_x for GaAs IC applications 30 (1987) 64
G.P. Donzelli and B. Gabbrielli, Comparative effects of polymide and PECVD silicon nitride as passivating layers on GaAs power MESFET characteristics 30 (1987) 95

MIS structure

K. Hofmann, G.W. Rubloff, M. Liehr and D.R. Young, High temperature reaction and defect chemistry at the Si/SiO_2 interface 30 (1987) 25
K.J. Barlow, W. Eccleston and S. Taylor, Effects of low temperature annealing on the electrical properties of plasma grown oxides 30 (1987) 47
C. Santinelli, R. Blanchet, P. Viktorovitch and F. Benyahia, Ion beam enhanced deposition of AlN_xO_y alloys on InP 30 (1987) 69
G. Unterbörsch, H.G. Bach, F. Schmitt, R. Schmidt and W. Schlaak, Dielectrics for passivation of planar InP/InGaAs diodes 30 (1987) 76
V.V.Pham, D. Esteve, J. Farré, A. El Mahdy, M. Ronda and J.J. Simonne, InP native oxide: a drift factor in InP–MIS 30 (1987) 83
W. Kulisch, H. Rombach and R. Kassing, Reduction of the concentration of slow insulator states in SiO_2/InP–MIS structures 30 (1987) 89
P. Boher, M. Renaud, J.M. Lopez-Villegas, J. Schneider and J.P. Chane, $InGaAs/Si_3N_4$ interface obtained in ultrahigh vacuum multipolar plasma: in-situ control by ellipsometry and electrical characterization 30 (1987) 100
K.K. Hung and Y.C. Cheng, Determination of $Si–SiO_2$ interface trap properties of p-MOS structures with very thin oxides by conductance measurement 30 (1987) 114
J. Esteve, J. Samitier, H. Altelarrea, A. Herms and J.R. Morante, Time-dependent response of interface states determined by using differential isothermal transient spectroscopy 30 (1987) 120
R. Girisch, R.P. Mertens and R.F. De Keersmaecker, A new method to determine Si/SiO_2 interface recombination parameters using a gate-controlled point-junction diode under illumination 30 (1987) 127
F.R. Libsch, A. Roy and M.H. White, Amphoteric trap modeling of multidielectric scaled SONOS nonvolatile memory structures 30 (1987) 160
K.K. Young, C. Hu and W.G. Oldham, Charge transport and trapping model for scaled nitride–oxide stacked films 30 (1987) 171
P. Fazan, M. Dutoit and M. Ilegems, Nitridation of thin SiO_2 films in N_2 and NH_3 plasmas 30 (1987) 224
M. El-Sayed and J. Camargo Da Costa, High field phenomena in thin plasma nitrided SiO_2 films 30 (1987) 229

X.R. Cheng, B.Y. Liu and Y.C. Cheng, Electrical conduction in thin thermally nitrided SiO_2 (nitroxide) 30 (1987) 237
D.J. DiMaria and M.V. Fischetti, Hot electrons in silicon dioxide: ballistic to steady-state transport 30 (1987) 278
A. Modelli, Valence band electron tunneling in metal–oxide–silicon structures 30 (1987) 298
P. Balk, L. Do Thanh, S. Ewert, M. Kuball and S. Schmitz, Interface states and impurities in MOS structures with very thin tunneling barriers 30 (1987) 304
C.T. Sah, Models and experiments on degradation of oxidized silicon (Extended Abstract) 30 (1987) 311
S.K. Haywood, M.M. Heyns and R.F. De Keersmaecker, The statistics of dielectric breakdown in MOS capacitors under static and dynamic voltage stress 30 (1987) 325
M. Dutoit, P. Fazan, A. Benjelloun, M. Ilegems and J.-M. Moret, Charge trapping and breakdown in thin SiO_2 polysilicon-gate MOS capacitors 30 (1987) 333
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MNOS structure (metal–nitride–oxide semiconductor)

J. Esteve, J. Samitier, H. Altelarrea, A. Herms and J.R. Morante, Time-dependent response of interface states determined by using differential isothermal transient spectroscopy 30 (1987) 120
G.L. Heyns and H.E. Maes, A new model for the discharge behaviour of metal–nitride–oxide–silicon (MNOS) non-volatile memory devices 30 (1987) 153
K.K. Young, C. Hu and W.G. Oldham, Charge transport and trapping model for scaled nitride–oxide stacked films 30 (1987) 171

MODFET (modulation doped field effect transistor)

T.N. Theis and B.D. Parker, Charge trapping in n-$Al_xGa_{1-x}As$ "insulators" and related device instabilities 30 (1987) 52

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MOSFET (metal–oxide–semiconductor field effect transistor)

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P. Heremans, Y.-C. Sun, G. Groeseneken and H.E. Maes, Evaluation of channel hot carrier effects in n-MOS transistors at 77 K with the charge pumping technique 30 (1987) 313
A. Asenov, M. Bollu, F. Koch and J. Scholz, On the nature and energy distribution of defect states caused by hot electrons in Si 30 (1987) 319

Multilayer dielectrics

G.L. Heyns and H.E. Maes, A new model for the discharge behaviour of metal–nitride–oxide–silicon (MNOS) non-volatile memory devices 30 (1987) 153
F.R. Libsch, A. Roy and M.H. White, Amphoteric trap modeling of multidielectric scaled SONOS nonvolatile memory structures 30 (1987) 160
K.K. Young, C. Hu and W.G. Oldham, Charge transport and trapping model for scaled nitride–oxide stacked films 30 (1987) 171
R. Baunach and A. Spitzer, Interfacial tunneling barrier heights in triple-layer dielectrics 30 (1987) 180

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M. Offenberg and P. Balk, Ion implantation induced stoichiometric imbalance in SiO_2 30 (1987) 265

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B. Balland, J.C. Bureau, A. Benamar, A. Ronda and A. Glachant, High and low thermal nitridation of SiO_2 thin films 30 (1987) 216
P. Fazan, M. Dutoit and M. Ilegems, Nitridation of thin SiO_2 films in N_2 and NH_3 plasmas 30 (1987) 224
M. El-Sayed and J. Camargo Da Costa, High field phenomena in thin plasma nitrided SiO_2 films 30 (1987) 229
X.R. Cheng, B.Y. Liu and Y.C. Cheng, Electrical conduction in thin thermally nitrided SiO_2 (nitroxide) 30 (1987) 237

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P. Boher, M. Renaud, J.M. Lopez-Villegas, J. Schneider and J.P. Chane, $InGaAs/Si_3N_4$ interface obtained in ultrahigh vacuum multipolar plasma: in-situ control by ellipsometry and electrical characterization 30 (1987) 100
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F.H.P.M. Habraken, Characterization of LPCVD and PECVD silicon oxynitride films 30 (1987) 186
J.B. Oude Elferink, U.A. van der Heide, W.M. Arnold Bik, F.H.P.M. Habraken and W.F. van der Weg, Hydrogen distribution in oxynitride/oxide structures 30 (1987) 197

Optical properties

G. Unterbörsch, H.G. Bach, F. Schmitt, R. Schmidt and W. Schlaak, Dielectrics for passivation of planar InP/InGaAs diodes 30 (1987) 76
R.J. Chater, J.A. Kilner, E. Scheid, S. Cristoloveneau, P.L.F. Hemment and K.J. Reeson, Optical and compositional studies of buried oxide layers in silicon formed by high dose implantation 30 (1987) 390

Oxidation

E.A. Irene and R. Ghez, Thermal oxidation of silicon: new experimental results and models 30 (1987) 1
J.M. deLarios, C.R. Helms, D.B. Kao and B.E. Deal, Effect of silicon surface cleaning procedures on oxidation kinetics and surface chemistry 30 (1987) 17
R.B. Beck, Constant current versus constant voltage plasma anodization techniques 30 (1987) 32
C. Vinckier, P. Coeckelberghs, G. Stevens and S. De Jaegere, Oxidation of silicon in the afterglow of microwave induced plasmas 30 (1987) 40
K.J. Barlow, W. Eccleston and S. Taylor, Effects of low temperature annealing on the electrical properties of plasma grown oxides 30 (1987) 47
V.V.Pham, D. Esteve, J. Farré, A. El Mahdy, M. Ronda and J.J. Simonne, InP native oxide: a drift factor in InP–MIS 30 (1987) 83

Oxygen

L. Do Thanh, V. Exner and P. Balk, Electrical properties of thin PECVD silicon oxynitride films 30 (1987) 204
A.H. van Ommen and M.P.A. Viegers, Buried oxide formation in Si by high-dose implantation of oxygen 30 (1987) 383
R.J. Chater, J.A. Kilner, E. Scheid, S. Cristoloveneau, P.L.F. Hemment and K.J. Reeson, Optical and compositional studies of buried oxide layers in silicon formed by high dose implantation 30 (1987) 390

Passivation

G. Unterbörsch, H.G. Bach, F. Schmitt, R. Schmidt and W. Schlaak, Dielectrics for passivation of planar InP/InGaAs diodes 30 (1987) 76
G.P. Donzelli and B. Gabbrielli, Comparative effects of polymide and PECVD silicon nitride as passivating layers on GaAs power MESFET characteristics 30 (1987) 95

Phosphorus

W. Kulisch, H. Rombach and R. Kassing, Reduction of the concentration of slow insulator states in SiO_2/InP–MIS structures 30 (1987) 89
A.H. van Ommen, Diffusion of Group III and V elements in SiO_2 30 (1987) 244
H. Neitzert, M. Offenberg and P. Balk, Hole capture in SiO_2 films after ion implantation 30 (1987) 272
R.B. Calligaro, Improvement of the Si–SiO_2 interface stress resistance of thin gate oxides after channel ion implantation 30 (1987) 339

Photocatalysis

E.A. Irene and R. Ghez, Thermal oxidation of silicon: new experimental results and models 30 (1987) 1
N. Arnold and L. Schleicher, Photo-stimulated CVD of SiN_x for GaAs IC applications 30 (1987) 64

S.K. Krawczyk and K. Schohe, Photoluminescence transient response as a tool to "track" the origin of drift phenomena at the InP/insulator interface 30 (1987) 108

Photoemission

C.T. Sah, Models and experiments on degradation of oxidized silicon (Extended Abstract) 30 (1987) 311
S.N. Kuznetsov and V.A. Gurtov, Charge storage in MOS structures as affected by avalanche- and photoinjection 30 (1987) 347

Photovoltage

R. Girisch, R.P. Mertens and R.F. De Keersmaecker, A new method to determine Si/SiO_2 interface recombination parameters using a gate-controlled point-junction diode under illumination 30 (1987) 127

Plasma processing

R.B. Beck, Constant current versus constant voltage plasma anodization techniques 30 (1987) 32
C. Vinckier, P. Coeckelberghs, G. Stevens and S. De Jaegere, Oxidation of silicon in the afterglow of microwave induced plasmas 30 (1987) 40
K.J. Barlow, W. Eccleston and S. Taylor, Effects of low temperature annealing on the electrical properties of plasma grown oxides 30 (1987) 47
V.V.Pham, D. Esteve, J. Farré, A. El Mahdy, M. Ronda and J.J. Simonne, InP native oxide: a drift factor in InP–MIS 30 (1987) 83
W. Kulisch, H. Rombach and R. Kassing, Reduction of the concentration of slow insulator states in SiO_2/InP–MIS structures 30 (1987) 89
P. Boher, M. Renaud, J.M. Lopez-Villegas, J. Schneider and J.P. Chane, $InGaAs/Si_3N_4$ interface obtained in ultrahigh vacuum multipolar plasma: in-situ control by ellipsometry and electrical characterization 30 (1987) 100
F.H.P.M. Habraken, Characterization of LPCVD and PECVD silicon oxynitride films 30 (1987) 186
J.B. Oude Elferink, U.A. van der Heide, W.M. Arnold Bik, F.H.P.M. Habraken and W.F. van der Weg, Hydrogen distribution in oxynitride/oxide structures 30 (1987) 197
L. Do Thanh, V. Exner and P. Balk, Electrical properties of thin PECVD silicon oxynitride films 30 (1987) 204
P. Fazan, M. Dutoit and M. Ilegems, Nitridation of thin SiO_2 films in N_2 and NH_3 plasmas 30 (1987) 224
M. El-Sayed and J. Camargo Da Costa, High field phenomena in thin plasma nitrided SiO_2 films 30 (1987) 229
P. Balk, L. Do Thanh, S. Ewert, M. Kuball and S. Schmitz, Interface states and impurities in MOS structures with very thin tunneling barriers 30 (1987) 304
D.B. Meakin, N.A. Economou, P.A. Coxon, J. Stoemenos, A. Lowe and P. Migliorato, Low defect-density polycrystalline silicon for high performance thin film transistors 30 (1987) 372

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L. Do Thanh, V. Exner and P. Balk, Electrical properties of thin PECVD silicon oxynitride films 30 (1987) 204
P. Migliorato and D.B. Meakin, Material properties and characteristics of polysilicon transistors for large area electronics 30 (1987) 353
D.B. Meakin, N.A. Economou, P.A. Coxon, J. Stoemenos, A. Lowe and P. Migliorato, Low defect-density polycrystalline silicon for high performance thin film transistors 30 (1987) 372

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G.P. Donzelli and B. Gabbrielli, Comparative effects of polymide and PECVD silicon nitride as passivating layers on GaAs power MESFET characteristics 30 (1987) 95

Radiation damage

M. Offenberg and P. Balk, Ion implantation induced stoichiometric imbalance in SiO_2 30 (1987) 265
H. Neitzert, M. Offenberg and P. Balk, Hole capture in SiO_2 films after ion implantation 30 (1987) 272
M. Dutoit, P. Fazan, A. Benjelloun, M. Ilegems and J.-M. Moret, Charge trapping and breakdown in thin SiO_2 polysilicon-gate MOS capacitors 30 (1987) 333
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B. Balland, J.C. Bureau, A. Benamar, A. Ronda and A. Glachant, High and low thermal nitridation of SiO_2 thin films 30 (1987) 216

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M.A. Sobolewski and C.R. Helms, Analysis of thin thermal silicon nitride films on silicon 30 (1987) 210

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H. Zogg and S. Blunier, Properties of graded Group IIa fluoride buffer layers for semiconductor heteroepitaxy 30 (1987) 402

Rutherford backscattering

F.H.P.M. Habraken, Characterization of LPCVD and PECVD silicon oxynitride films 30 (1987) 186
H. Zogg and S. Blunier, Properties of graded Group IIa fluoride buffer layers for semiconductor heteroepitaxy 30 (1987) 402

Scanning electron microscopy

K. Hofmann, G.W. Rubloff, M. Liehr and D.R. Young, High temperature reaction and defect chemistry at the Si/SiO_2 interface 30 (1987) 25
Li Hui, Sun Guo-Liang, Zhan Juan and Tong Qin-Yi, Some material structural properties of SOI substrates produced by SDB technology 30 (1987) 397
H. Zogg and S. Blunier, Properties of graded Group IIa fluoride buffer layers for semiconductor heteroepitaxy 30 (1987) 402

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M.A. Sobolewski and C.R. Helms, Analysis of thin thermal silicon nitride films on silicon 30 (1987) 210

Secondary ion mass spectroscopy

B. Balland, J.C. Bureau, A. Benamar, A. Ronda and A. Glachant, High and low thermal nitridation of SiO_2 thin films 30 (1987) 216
H. Neitzert, M. Offenberg and P. Balk, Hole capture in SiO_2 films after ion implantation 30 (1987) 272
R.J. Chater, J.A. Kilner, E. Scheid, S. Cristoloveneau, P.L.F. Hemment and K.J. Reeson, Optical and compositional studies of buried oxide layers in silicon formed by high dose implantation 30 (1987) 390

Silica

G. Unterbörsch, H.G. Bach, F. Schmitt, R. Schmidt and W. Schlaak, Dielectrics for passivation of planar InP/InGaAs diodes 30 (1987) 76

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E.A. Irene and R. Ghez, Thermal oxidation of silicon: new experimental results and models 30 (1987) 1

Silicon

E.A. Irene and R. Ghez, Thermal oxidation of silicon: new experimental results and models 30 (1987) 1
J.M. deLarios, C.R. Helms, D.B. Kao and B.E. Deal, Effect of silicon surface cleaning procedures on oxidation kinetics and surface chemistry 30 (1987) 17
K. Hofmann, G.W. Rubloff, M. Liehr and D.R. Young, High temperature reaction and defect chemistry at the Si/SiO_2 interface 30 (1987) 25
R.B. Beck, Constant current versus constant voltage plasma anodization techniques 30 (1987) 32
C. Vinckier, P. Coeckelberghs, G. Stevens and S. De Jaegere, Oxidation of silicon in the afterglow of microwave induced plasmas 30 (1987) 40
A.H. van Ommen and M.P.A. Viegers, Buried oxide formation in Si by high-dose implantation of oxygen 30 (1987) 383

Li Hui, Sun Guo-Liang, Zhan Juan and Tong Qin-Yi, Some material structural properties of SOI substrates produced by SDB technology 30 (1987) 397

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E.A. Irene and R. Ghez, Thermal oxidation of silicon: new experimental results and models 30 (1987) 1
J.M. deLarios, C.R. Helms, D.B. Kao and B.E. Deal, Effect of silicon surface cleaning procedures on oxidation kinetics and surface chemistry 30 (1987) 17
K. Hofmann, G.W. Rubloff, M. Liehr and D.R. Young, High temperature reaction and defect chemistry at the Si/SiO_2 interface 30 (1987) 25
R.B. Beck, Constant current versus constant voltage plasma anodization techniques 30 (1987) 32
C. Vinckier, P. Coeckelberghs, G. Stevens and S. De Jaegere, Oxidation of silicon in the afterglow of microwave induced plasmas 30 (1987) 40
K.J. Barlow, W. Eccleston and S. Taylor, Effects of low temperature annealing on the electrical properties of plasma grown oxides 30 (1987) 47
V.V.Pham, D. Esteve, J. Farré, A. El Mahdy, M. Ronda and J.J. Simonne, InP native oxide: a drift factor in InP–MIS 30 (1987) 83
K.K. Hung and Y.C. Cheng, Determination of $Si–SiO_2$ interface trap properties of p-MOS structures with very thin oxides by conductance measurement 30 (1987) 114
G.L. Heyns and H.E. Maes, A new model for the discharge behaviour of metal–nitride–oxide–silicon (MNOS) non-volatile memory devices 30 (1987) 153
F.R. Libsch, A. Roy and M.H. White, Amphoteric trap modeling of multidielectric scaled SONOS nonvolatile memory structures 30 (1987) 160
K.K. Young, C. Hu and W.G. Oldham, Charge transport and trapping model for scaled nitride–oxide stacked films 30 (1987) 171
R. Baunach and A. Spitzer, Interfacial tunneling barrier heights in triple-layer dielectrics 30 (1987) 180
B. Balland, J.C. Bureau, A. Benamar, A. Ronda and A. Glachant, High and low thermal nitridation of SiO_2 thin films 30 (1987) 216
P. Fazan, M. Dutoit and M. Ilegems, Nitridation of thin SiO_2 films in N_2 and NH_3 plasmas 30 (1987) 224
M. El-Sayed and J. Camargo Da Costa, High field phenomena in thin plasma nitrided SiO_2 films 30 (1987) 229
X.R. Cheng, B.Y. Liu and Y.C. Cheng, Electrical conduction in thin thermally nitrided SiO_2 (nitroxide) 30 (1987) 237
A.H. van Ommen, Diffusion of Group III and V elements in SiO_2 30 (1987) 244
M. Offenberg and P. Balk, Ion implantation induced stoichiometric imbalance in SiO_2 30 (1987) 265
H. Neitzert, M. Offenberg and P. Balk, Hole capture in SiO_2 films after ion implantation 30 (1987) 272
D.J. DiMaria and M.V. Fischetti, Hot electrons in silicon dioxide: ballistic to steady-state transport 30 (1987) 278
A. Modelli, Valence band electron tunneling in metal–oxide–silicon structures 30 (1987) 298
P. Balk, L. Do Thanh, S. Ewert, M. Kuball and S. Schmitz, Interface states and impurities in MOS structures with very thin tunneling barriers 30 (1987) 304
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S.K. Haywood, M.M. Heyns and R.F. De Keersmaecker, The statistics of dielectric breakdown in MOS capacitors under static and dynamic voltage stress 30 (1987) 325
M. Dutoit, P. Fazan, A. Benjelloun, M. Ilegems and J.-M. Moret, Charge trapping and breakdown in thin SiO_2 polysilicon-gate MOS capacitors 30 (1987) 333
R.B. Calligaro, Improvement of the Si–SiO_2 interface stress resistance of thin gate oxides after channel ion implantation 30 (1987) 339
S.N. Kuznetsov and V.A. Gurtov, Charge storage in MOS structures as affected by avalanche- and photoinjection 30 (1987) 347
A.H. van Ommen and M.P.A. Viegers, Buried oxide formation in Si by high-dose implantation of oxygen 30 (1987) 383
R.J. Chater, J.A. Kilner, E. Scheid, S. Cristoloveneau, P.L.F. Hemment and K.J. Reeson, Optical and compositional studies of buried oxide layers in silicon formed by high dose implantation 30 (1987) 390
Li Hui, Sun Guo-Liang, Zhan Juan and Tong Qin-Yi, Some material structural properties of SOI substrates produced by SDB technology 30 (1987) 397

Silicon nitride

N. Arnold and L. Schleicher, Photo-stimulated CVD of SiN_x for GaAs IC applications 30 (1987) 64
G. Unterbörsch, H.G. Bach, F. Schmitt, R. Schmidt and W. Schlaak, Dielectrics for passivation of planar InP/InGaAs diodes 30 (1987) 76
G.P. Donzelli and B. Gabbrielli, Comparative effects of polymide and PECVD silicon nitride as passivating layers on GaAs power MESFET characteristics 30 (1987) 95
P. Boher, M. Renaud, J.M. Lopez-Villegas, J. Schneider and J.P. Chane, InGaAs/Si_3N_4 interface obtained in ultrahigh vacuum multipolar plasma: in-situ control by ellipsometry and electrical characterization 30 (1987) 100
G.L. Heyns and H.E. Maes, A new model for the discharge behaviour of metal–nitride–oxide–silicon (MNOS) non-volatile memory devices 30 (1987) 153
F.R. Libsch, A. Roy and M.H. White, Amphoteric trap modeling of multidielectric scaled SONOS nonvolatile memory structures 30 (1987) 160
K.K. Young, C. Hu and W.G. Oldham, Charge transport and trapping model for scaled nitride–oxide stacked films 30 (1987) 171
R. Baunach and A. Spitzer, Interfacial tunneling barrier heights in triple-layer dielectrics 30 (1987) 180
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J.B. Oude Elferink, U.A. van der Heide, W.M. Arnold Bik, F.H.P.M. Habraken and W.F. van der Weg, Hydrogen distribution in oxynitride/oxide structures 30 (1987) 197
L. Do Thanh, V. Exner and P. Balk, Electrical properties of thin PECVD silicon oxynitride films 30 (1987) 204

P. Balk, L. Do Thanh, S. Ewert, M. Kuball and S. Schmitz, Interface states and impurities in MOS structures with very thin tunneling barriers 30 (1987) 304
C.T. Sah, Models and experiments on degradation of oxidized silicon (Extended Abstract) 30 (1987) 311

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K. Hofmann, G.W. Rubloff, M. Liehr and D.R. Young, High temperature reaction and defect chemistry at the Si/SiO_2 interface 30 (1987) 25
K.J. Barlow, W. Eccleston and S. Taylor, Effects of low temperature annealing on the electrical properties of plasma grown oxides 30 (1987) 47
K.K. Hung and Y.C. Cheng, Determination of $Si–SiO_2$ interface trap properties of p-MOS structures with very thin oxides by conductance measurement 30 (1987) 114
J. Esteve, J. Samitier, H. Altelarrea, A. Herms and J.R. Morante, Time-dependent response of interface states determined by using differential isothermal transient spectroscopy 30 (1987) 120
R. Girisch, R.P. Mertens and R.F. De Keersmaecker, A new method to determine Si/SiO_2 interface recombination parameters using a gate-controlled point-junction diode under illumination 30 (1987) 127
A. Stesmans, Low-temperature ESR study of P_{b0} defects residing in the (111) Si/native oxide interface 30 (1987) 134
M. Bollu, F. Koch, A. Madenach and J. Scholz, Electrical switching and noise spectrum of $Si–SiO_2$ interface defects generated by hot electrons 30 (1987) 142
M.J. Kirton, M.J. Uren and S. Collins, Individual interface states and their implications for low-frequency noise in MOSFETs 30 (1987) 148
B. Balland, J.C. Bureau, A. Benamar, A. Ronda and A. Glachant, High and low thermal nitridation of SiO_2 thin films 30 (1987) 216
C.T. Sah, Models and experiments on degradation of oxidized silicon (Extended Abstract) 30 (1987) 311
P. Heremans, Y.-C. Sun, G. Groeseneken and H.E. Maes, Evaluation of channel hot carrier effects in n-MOS transistors at 77 K with the charge pumping technique 30 (1987) 313
A. Asenov, M. Bollu, F. Koch and J. Scholz, On the nature and energy distribution of defect states caused by hot electrons in Si 30 (1987) 319
M. Dutoit, P. Fazan, A. Benjelloun, M. Ilegems and J.-M. Moret, Charge trapping and breakdown in thin SiO_2 polysilicon-gate MOS capacitors 30 (1987) 333
R.B. Calligaro, Improvement of the $Si–SiO_2$ interface stress resistance of thin gate oxides after channel ion implantation 30 (1987) 339
S.N. Kuznetsov and V.A. Gurtov, Charge storage in MOS structures as affected by avalanche- and photoinjection 30 (1987) 347
R.J. Chater, J.A. Kilner, E. Scheid, S. Cristoloveneau, P.L.F. Hemment and K.J. Reeson, Optical and compositional studies of buried oxide layers in silicon formed by high dose implantation 30 (1987) 390

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H. Zogg and S. Blunier, Properties of graded Group IIa fluoride buffer layers for semiconductor heteroepitaxy 30 (1987) 402

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J.M. deLarios, C.R. Helms, D.B. Kao and B.E. Deal, Effect of silicon surface cleaning procedures on oxidation kinetics and surface chemistry 30 (1987) 17
V.V.Pham, D. Esteve, J. Farré, A. El Mahdy, M. Ronda and J.J. Simonne, InP native oxide: a drift factor in InP–MIS 30 (1987) 83
P. Boher, M. Renaud, J.M. Lopez-Villegas, J. Schneider and J.P. Chane, InGaAs/Si_3N_4 interface obtained in ultrahigh vacuum multipolar plasma: in-situ control by ellipsometry and electrical characterization 30 (1987) 100
S.K. Krawczyk and K. Schohe, Photoluminescence transient response as a tool to "track" the origin of drift phenomena at the InP/insulator interface 30 (1987) 108

Surface composition

J.M. deLarios, C.R. Helms, D.B. Kao and B.E. Deal, Effect of silicon surface cleaning procedures on oxidation kinetics and surface chemistry 30 (1987) 17
P. Balk, L. Do Thanh, S. Ewert, M. Kuball and S. Schmitz, Interface states and impurities in MOS structures with very thin tunneling barriers 30 (1987) 304

Surface defects

K. Hofmann, G.W. Rubloff, M. Liehr and D.R. Young, High temperature reaction and defect chemistry at the Si/SiO_2 interface 30 (1987) 25
A. Stesmans, Low-temperature ESR study of P_{b0} defects residing in the (111) Si/native oxide interface 30 (1987) 134

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A. Stesmans, Low-temperature ESR study of P_{b0} defects residing in the (111) Si/native oxide interface 30 (1987) 134

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H. Zogg and S. Blunier, Properties of graded Group IIa fluoride buffer layers for semiconductor heteroepitaxy 30 (1987) 402

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A.H. van Ommen, Diffusion of Group III and V elements in SiO_2 30 (1987) 244

Thermionic emission

E.A. Irene and R. Ghez, Thermal oxidation of silicon: new experimental results and models 30 (1987) 1

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P. Migliorato and D.B. Meakin, Material properties and characteristics of polysilicon transistors for large area electronics 30 (1987) 353
D.B. Meakin, N.A. Economou, P.A. Coxon, J. Stoemenos, A. Lowe and P. Migliorato, Low defect-density polycrystalline silicon for high performance thin film transistors 30 (1987) 372

Transient spectroscopy

J. Esteve, J. Samitier, H. Altelarrea, A. Herms and J.R. Morante, Time-dependent response of interface states determined by using differential isothermal transient spectroscopy 30 (1987) 120

Tunneling

V.V.Pham, D. Esteve, J. Farré, A. El Mahdy, M. Ronda and J.J. Simonne, InP native oxide: a drift factor in InP–MIS 30 (1987) 83
F.R. Libsch, A. Roy and M.H. White, Amphoteric trap modeling of multidielectric scaled SONOS nonvolatile memory structures 30 (1987) 160
K.K. Young, C. Hu and W.G. Oldham, Charge transport and trapping model for scaled nitride–oxide stacked films 30 (1987) 171
R. Baunach and A. Spitzer, Interfacial tunneling barrier heights in triple-layer dielectrics 30 (1987) 180
X.R. Cheng, B.Y. Liu and Y.C. Cheng, Electrical conduction in thin thermally nitrided SiO_2 (nitroxide) 30 (1987) 237
A. Modelli, Valence band electron tunneling in metal–oxide–silicon structures 30 (1987) 298
C.T. Sah, Models and experiments on degradation of oxidized silicon (Extended Abstract) 30 (1987) 311

Vibration of surface atoms or molecules

D.J. DiMaria and M.V. Fischetti, Hot electrons in silicon dioxide: ballistic to steady-state transport 30 (1987) 278
P. Balk, L. Do Thanh, S. Ewert, M. Kuball and S. Schmitz, Interface states and impurities in MOS structures with very thin tunneling barriers 30 (1987) 304

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S.K. Haywood, M.M. Heyns and R.F. De Keersmaecker, The statistics of dielectric breakdown in MOS capacitors under static and dynamic voltage stress 30 (1987) 325

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H. Zogg and S. Blunier, Properties of graded Group IIa fluoride buffer layers for semiconductor heteroepitaxy 30 (1987) 402

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J.M. deLarios, C.R. Helms, D.B. Kao and B.E. Deal, Effect of silicon surface cleaning procedures on oxidation kinetics and surface chemistry 30 (1987) 17
S.K. Krawczyk and K. Schone, Photoluminescence transient response as a tool to "track" the origin of drift phenomena at the InP/insulator interface 30 (1987) 108
M.A. Sobolewski and C.R. Helms, Analysis of thin thermal silicon nitride films on silicon 30 (1987) 210